C-A OPERATIONS PROCEDURES MANUAL

4.47 AGS Access During HEBT Operation

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Hand Processed Changes

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Collider-Accelerator Department Chairman   Date

P. Ingrassia

4.47 AGS Access During HEBT Operation

1. Purpose

    1.1   The purpose of this procedure is to instruct Operations Coordinators to apply Radiation Safety LOTO to the "LINAC" key during periods when protons may be delivered by Linac to HEBT and access is required to the AGS. Prerequisites for the application of RSLOTO are found in paragraphs 3.1 to 3.4 below.

2. Responsibilities

    2.1   The Operations Coordinator (OC) is responsible for the execution of this procedure.

3. Prerequisites

    3.1   Linac is delivering, or is configured to deliver (Rf is on and Tanks are at gradient for acceleration), protons to the HEBT (High Energy Beam Transport).
    3.2   The Booster injection critical devices are LTB DH1 and LTB BS2, which allows LTB BS1 to be opened for polarized proton measurements in HEBT.
    3.3   No Radiation Monitor (Chipmunk) has been installed on the AGS side of the AGS/HEBT door in the AGS ring
    3.4   An access will be made into the AGS enclosure.

4. Precautions

    4.1   Radiation levels on the AGS side of the AGS/HEBT door could reach three hundred mrem/hr before the **BLIP** chipmunk interlocks the Linac proton beam.

5. Procedure

    5.1   IF any access is to be made to the AGS enclosure AND all of the conditions of paragraphs 3.1 through 3.4 are true, THEN, before the access, the OC shall

        5.1.1   Remove and hold the Linac captive RESET/ENABLE key from MCR_2-1F
        5.1.2   Apply RS LOTO to the LINAC keyswitch according the RS LOTO procedure C-A OPM 9.1.16 Lockout Tagout for Radiation Safety (RSLOTO)

    5.2   When the AGS access is complete, the OC shall remove RSLOTO from the keyswitch.

5.3   IF a chipmunk area monitor is provided, THEN

      5.3.1   RS LOTO of LINAC keyswitch is not required
      5.3.2   An operator shall place the Chipmunk inside the AGS at the AGS/HEBT door before other workers enter the enclosure.
      5.3.3   After all workers have left and before the gate is reset, an operator shall remove the Chipmunk from the enclosure and store it OUTSIDE the AGS South Gate.

6.   <u>Documentation</u>

6.1   [C-A OPM-ATT. 9.1.16.b RS LOTO Log Sheet](#).

7.   <u>References</u>

7.1   [C-A OPM 9.1.16 Lockout Tagout for Radiation Safety (RSLOTO).](#)

8.   <u>Attachments</u>

None